

## **Enhancing Fitness with EnhanceFitness**

**An Evidence-Based Intervention  
for Older Adults and People  
with Chronic Disease**

**Satellite Conference  
Thursday, January 26, 2006  
12:00 - 2:30 p.m. (Central Time)**

**Produced by the Alabama Department of Public Health  
Video Communication and Distance Learning Division**

## **Faculty**

**Susan Snyder  
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## **Faculty**

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Shoreline, Washington**

## **Program Objectives**

- Describe the basic components (how it is delivered, types of exercise) of the EnhanceFitness program.
- Identify the facility, space and equipment requirements for EnhanceFitness.
- Discuss the research demonstrating the effectiveness of EnhanceFitness.
- List the steps necessary to implement the EnhanceFitness program.

## **Project Enhance Ensemble**

- EnhanceFitness  
(formerly Lifetime Fitness Program)
- EnhanceWellness  
(formerly Health Enhancement Program)

## **Project Enhance Ensemble**

- Community-based health promotion programs designed for older adults.
- Evidence-based – proven to get measurable improvements in health and well-being of older adults.
- Powerful partnerships.
- Award-winning.

### **Presentation Overview**

- EnhanceFitness overview
- Program attributes
- Performance measures
- Demographic and performance data
- Ongoing research
- Program requirements
- Program pricing
- Getting started – implementation steps
- Lessons learned and program successes

### **EnhanceFitness Beginnings**

- 1994 Randomized Clinical Trial – University of Washington Health Promotion Research Center, Group Health Cooperative, Senior Services
- Significant improvement in physical functioning, socialization, and decreased depression and pain in community based older adults compared to control group

### **EnhanceFitness Beginnings**

- Originally developed to transition participants from class to doing exercises at home

### **Initial Study Results**

- 1998 RCT – University of Washington
  - (Wallace, et al., 1998)
  - Six month study at Northshore Senior Center
- Class held 3 times/week, 1 hour sessions
- Over 90% attendance at classes

### **Initial Study Results**

- 85% completed 6 month program
- Significantly better scores on 7 of 8 SF-36 subscales compared to controls
- Fewer depressive symptoms than controls

### **What is EnhanceFitness?**

- Turnkey package designed for ease of implementation, consistency, fidelity.
- Group exercise class, with exercises that increase strength, flexibility, balance and aerobic capacity.
- Ongoing, one hour classes, 3 times per week.
- Certified fitness instructors trained in EnhanceFitness protocols.

### **EnhanceFitness Class Format**

- Warm-up (5-8")
- Cardiovascular workout (20")
  - Instructor determines intensity of workout based on participant ability
- Cool-down (3-5")

### **EnhanceFitness Class Format**

- Resistance strength training (20")
- Flexibility (8-10")
- Balance training included in warm-up and cool-down
- Music typically provided by instructor

### **EnhanceFitness Attributes**

- Accommodates all levels of fitness
  - Level I – standing version
  - Level II – modified exercises for more frail adults at risk for falls
- Instructor and site support
- Ongoing research
- Annual program review and modification
- Participant and program level outcome data collected, analyzed, distributed

### **EnhanceFitness Attributes**

- Can be tailored for specific chronic diseases, (i.e. arthritis)
- Multiple forms of exercise
  - Cardiovascular conditioning
  - Resistance and strength training
  - Flexibility training
  - Balance and coordination

### **EnhanceFitness Attributes**

- Successful partnerships
  - Aging services provider, (i.e. senior center, adult day care, continuing care retirement community)
  - Area Agency on Aging
  - Department of Health
  - Health care provider, (i.e. hospital, HMO)
  - University
  - Parks and Recreation Department

### **EnhanceFitness Attributes**

- Functional fitness testing
- Data analysis
- Annual national/individual site reports
- Ongoing research examining effectiveness – dynamic program
- Scientific advisory board

## Functional Fitness Testing

- Assess functional fitness of older adults for:
  - Identification of at-risk participants
  - Program planning and evaluation
  - Goal setting and motivation of participants

## Performance Measures Collected

- Functional Fitness Test (Jones and Rikli, 2002)
- Baseline and each 4 months:
  - Up and Go (balance and mobility)
  - Biceps Curl (upper body strength)
  - Chair Stand (lower body strength)
- Optional tests: 6-minute walk, 2-minute step test, 1-leg stand
- Normal limits calculated from age and gender standards

## EnhanceFitness Data Analysis

- Participant data collected
  - Baseline and follow-up performance measures
  - Demographic data
  - Satisfaction survey
  - Attendance
- Data analyzed yearly by site and comparing among all sites

## Annual Site Reports

- Each EnhanceFitness Site receives annual report detailing:
  - Baseline mean scores compared to all other sites
  - Baseline mean scores compared to follow-up
  - Baseline mean scores compared to follow-up for all other sites
- Other reports, as requested and time available

## Demographic Comparison

Characteristic	1998 Study	2005
Age (mean)	71.1	76
Gender (% female)	70%	75%
Race (% white)	99%	60%
Marital Status (% married)	55%	35%

## National Performance Outcomes 2005 (n=382-403)

Test	Baseline Mean	Follow-up Mean	Result
Up and Go (sec)	7.9	7.3	Significantly Improved
Chair Stand (#)	13.6	15.0	Significantly Improved
Arm Curls (#)	18.5	20.1	Significantly Improved

## **Expanding the Evidence**

- 2003 Group Health Cooperative Cost Analysis
- 2003 Fit for Life Pilot Study
- 2004 Communities of Color Analysis
- 2005 Senior Falls Prevention Program

## **Expanding the Evidence**

- Current projects
  - Arthritis in Focus, Portland, Oregon (University of Washington)
  - Arthritis Benefits of a Physical Activity Program in W. Virginia (West Virginia University)
  - Florida International University, Miami
  - Fit for Life, Los Angeles, CA (UCLA)
  - Ethnic Participants Experiences (UW Graduate Students)

## **Group Health Cooperative (GHC) Cost Analysis**

(Ackerman, et. al, 2003)

- GHC Medicare EnhanceFitness participants:
- Average increase in annual total health costs less in participants (\$642) compared to non-participants (\$1,175)
- 6% cost savings for once per week participants
- 21% cost savings for 2+ week participants

## **Fit for Life Pilot Study**

(Sarkisian, et. al., 2003)

- Sedentary older adults from 3 senior centers in LA.
- Weekly facilitated group discussions + 1 hour EF.
- Main outcome: steps per week measured by digital pedometer.
- In 4-weeks participants successfully raised and sustained walking levels.
- Efficacy of intervention currently being tested in NIA-funded RCT among 600 sedentary older Latinos.

## **Comparison of Sites Serving White Communities and Communities of Color**

(Snyder, Belza, 2004)

- Participants at sites serving communities of color upon entry, were:
  - Younger,
  - Report ↑ pain,
  - Poorer self-rated health

## **Comparison of Sites Serving White Communities and Communities of Color**

(Snyder, Belza, 2004)

- Participants at sites serving communities of color upon entry, were:
  - Less upper- and lower- extremity strength compared to those entering at sites serving mostly white communities.
- At 4 months significantly improved upper and lower extremity strength.

## **Program Requirements**

- Facility
- Equipment
- Instructor
- Licensing
- Training
- Monitoring

## **Facility Recommendations**

- Wooden floor with air space underneath
- Room temperature of 68-72 degrees
- Area that does not echo
- Enough space for participants to move around comfortably
- ADA accessible

## **Equipment**

- Class equipment:
- Adjustable ankle and wrist weight cuffs
  - Typical class has: 18 one- to five-pound weights; 15 ten-pound weights; 1 twenty-pound weight
- Sturdy, straight-back, armless chairs
  - Level 1, however, uses chair with arms

## **Equipment**

- Performance Measure Equipment:
  - Stop watch
  - Five-pound and eight-pound hand-weights
  - Tape measure
  - Cone (or garbage can or large water bottle)

## **Instructor Requirements**

- EnhanceFitness Instructor Training (1 1/2 days)
- Nationally recognized fitness instructor certification
- Current CPR certification

## **Instructor Requirements**

- Skills and Experience (preferred, not required)
  - 2 years group exercise leader experience or background in exercise science, physical education or related health field
  - Knowledge of older adults' needs and issues
  - Basic motivational techniques
  - Attendance at annual EnhanceFitness workshop

## **National Fitness Certifying Organizations**

(sample listing only)

- American College of Sports Medicine (ACSM)
- American Council on Exercise (ACE)
- YMCA
- Aerobics & Fitness Association of America (AFAA)
- American Senior Fitness Association (ASFA)
- National Strength & Conditioning Association (NSCA)

## **Cost Effective Licensing and Training**

- Licensing
  - Year One EnhanceFitness license
  - Year Two and beyond renewal options

## **Cost Effective Licensing and Training**

- Training options
  - EnhanceFitness instructor training
  - National Fitness certification by EnhanceFitness Trainer (YMCA)
  - EnhanceFitness Training of Trainer (TOT)

## **Year One Licensing**

(pricing as of 12-31-2005)

- Pricing -- \$3,000 (includes one site)
  - + \$1,000 for each additional site
- Package includes:
  - Two day EnhanceFitness instructor training
  - Instructor manual, participant guide and video tape or DVD
  - Data collection forms
  - Data entry, analysis, and reports

## **Year One Licensing**

(pricing as of 12-31-2005)

- Package includes:
  - Annual site and national program reports
  - Link to Project Enhance website
  - Marketing materials
  - Program updates
  - Subscription to listserve
  - Attendance at annual workshop

## **License Renewal Options**

(pricing as of 12-31-2005)

- Pricing -- \$300/site
  - \$100 for each additional site
- Package includes:
  - Data collection forms
  - Data entry, analysis, and reports
  - Annual site and national program reports
  - Link to Project Enhance website
  - Marketing materials
  - Program updates
  - Subscription to listserve
  - Attendance at annual workshop

## Optional Training Available Through EF

(pricing as of 12-31-2005)

- If Instructor does not have national fitness certification:
- One-day YMCA Certification Training (\$600)
  - YMCA Healthy Lifestyles Principles is pre-requisite
  - Additional costs per trainee:
    - \$35 for text; \$15 for YMCA processing fee

## Optional Training Available Through EF

(pricing as of 12-31-2005)

- To become an EnhanceFitness Trainer:
- EnhanceFitness Instructor Trainer Training (\$1,000)
  - Trainer manual
  - EnhanceFitness annual trainer workshop
  - Listing on EnhanceFitness website as EnhanceFitness Trainer
  - Program updates, including manual and marketing materials
  - Subscription to listserve

## Site Monitoring Recommendations

- Monitoring can be provided by
  - EnhanceFitness trainer for \$300/day + expenses, or
  - Local trainer (who has received EnhanceFitness TOT)
- Monitoring form provided by EnhanceFitness

## Site Monitoring Recommendations

- Monitoring schedule:
  - New EnhanceFitness instructor – trainer visit within 1-2 months of class begin date
    - If necessary, more visits for quality assurance
  - Experienced EnhanceFitness instructors – annually for first two years, then once every two years

## Steps to Getting Started

- Develop your partnerships
- Determine sites/reach
- Negotiate and sign contract
- Recruit instructors and trainers
- Schedule and conduct instructor training
- Marketing program
- Register participants
- Complete demographic and performance measures
- Begin class(es)!

## EF Dissemination 2005 - 103 Sites





### **Dissemination Lessons Learned**

- Planning prior to implementing classes is imperative to assure program success.
- Community-based group exercise classes can improve functioning in communities of color; tailor to the community/setting/population.
- NCOA Diffusion of Innovation Tool helpful in evaluating sites capacity, willingness and resource needs for implementing EF.

### **Dissemination Lessons Learned**

- Maintain fidelity but allow local adaptability.
- Develop program champions – participants, funders, researchers, and health care providers.
- Ongoing training of instructors on importance of performance measures and following program protocols is critical to program fidelity.

### **Dissemination Successes**

- Stronger, healthier, engaged participants.
- Strong academic-community partnerships, enthusiastic and competent research teams.
- Excited, passionate, and committed instructors and staff.
- Sites with new members and more physical activity options.

### **A Participant's Testimonial**

“This program is my lifeline. I came here on the recommendation of a physical therapist while undergoing treatment for knee problems, a broken ankle and arthritis. The improvement has been remarkable. I can once again walk 2 or 3 miles with no difficulty...In fact, I am in better shape than some of my friends who are 15 years younger.”

– Doris M., age 69

### **EnhanceFitness Awards**

- Washington Coalition for Promoting Physical Activity, Award for Outstanding Achievement in the Promotion of Physical Activity , Community Based Program, 2005
- US Health and Human Services Secretary's 2005 Innovation in Prevention Award, Non-Profit Category
- US Administration on Aging You Can! Program Champion, 2005

### **EnhanceFitness Awards**

- National Council on Aging One of Ten Exemplary Physical Activity Programs for Older Adults in USA, 2003
- Northshore Senior Center (SWP Pilot Site)
- National Council on Aging/National Institute of Senior Centers' 1999 Research Award.
- Website: [www.projectenhance.org](http://www.projectenhance.org)

## **Contact Information**

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## **EnhanceFitness Citations**

- Wallace JI, et al. (1998). Implementation and effectiveness of a community-based health promotion program for older adults. *Journal of Gerontology: Medical Sciences*, 53a(4): M301-M306.
- Ackermann RT, et al. (2003). Community exercise program use and changes in healthcare costs for older adults. *American Journal of Preventative Medicine*, 25(3): 232-7.
- Moore, T.L., McCamey, M.A., Johnson, M.A., Quinn, M.E. and Cress, M.E. (2004). An Evidence-based exercise program can be implemented in a community of underserved elders. *Medicine and Science in Sports and Exercise*. 36(5):S193.
- Snyder S, Belza B. (2005). Eliminating disparities in communities of color through the Lifetime Fitness Program [abstract]. *Preventing Chronic Disease* [serial online] 2005 Apr.

## **Upcoming Programs**

**HIV/AIDS in the South  
and Challenges in Other  
Non-Metropolitan Areas in the U.S.  
Friday, January 27, 2006  
2:00 - 4:00 p.m.**

**For complete listing of upcoming  
programs visit: [www.adph.org/alphtn](http://www.adph.org/alphtn)**